

What is claimed is:

1. A lie-down massager, comprising:
 - a) a base frame having an elongated top panel, wherein an elongated top opening is formed centrally and lengthwise through the elongated top panel;
 - b) a rider provided below the elongated top panel of the base frame;
 - c) a guide member movably engaged between the base frame and the rider so as to enable the rider to make a horizontally reciprocal movement relative to the base frame;
 - d) a lifter having a top plate and a bottom plate, a fluid operated cylinder fixed to the bottom plate, and a compressor providing pressurized fluid to the fluid operated cylinder, wherein the fluid operated cylinder has a cylinder shaft that is connected to the top plate, wherein the cylinder shaft moves the top plate up and down; and
 - e) massage bumps attached on the top plate of the lifter and moving vertically and/or horizontally along the elongated top opening of the elongated top panel of the base frame.

2. The lie-down massager of claim 1 further comprising a pad covering the massage bumps and the elongated top opening of the base frame.
- 5 3. The lie-down massager of claim 1 wherein the massage bumps are partitioned to first and second pairs, wherein the first pair bumps are aligned parallel to the second pair bumps.
- 10 4. The lie-down massager of claim 3 further comprising:
 - a) first and second bump holders propping and maintaining the first and second pair bumps above the top plate of the lifter, wherein the first and second bump holders are tapered toward each lower end thereof; and
 - b) a first engagement member to rockingly engage the lower ends of the bump holders to the top plate of the lifter.
- 15 5. The lie-down massager of claim 4 further comprising a second engagement member to rollingly engage the massage bumps thereto.
- 20 6. The lie-down massager of claim 4 wherein the massage bumps are roller balls.

7. The lie-down massager of claim 6 wherein the roller balls are formed of jade.

5 8. The lie-down massager of claim 1 wherein each of the massage bumps includes a heater.

9. The lie-down massager of claim 8 wherein the heater is a heating lamp generating heat and infrared rays.

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10. The lie-down massager of claim 1 wherein the guide member comprises:

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a) one or more roller gear engaged to and powered by a roller gear motor, wherein the roller gear motor is fixed to the rider; and

b) one or more side rack gears parallel to each other and provided lengthwise in the base frame;

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wherein the roller gears are rollably connected to the rider and rotatably mounted on the side rack gears.

11. The lie-down massager of claim 1 wherein the guide member comprises:

- a) rider guide rollers provided on each side of the rider, wherein the rider guide rollers are rollably engaged to the base frame to guide a horizontally reciprocal movement of the rider;
- 5 b) a pair of pulleys linked by a rope and respectively mounted in a front end portion and a rear end portion of the base frame, wherein a predetermined portion of the rope is fixedly attached to the rider so that the pulley rotation enables the rider to generate a horizontally reciprocal movement of the rider;
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12. The lie-down massager of claim 11 wherein the pulleys are relatively twisted by 90 degrees against each other.

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13. The lie-down massager of claim 1 further comprising:

- a) a pair of roller coasters parallel to each other, wherein the roller coasters are attached to the base frame, wherein each of the roller coasters has a substantially waved top surface;
- 20 and
- b) coaster guide rollers formed outwardly extending from each side of the lifter, wherein the coaster guide rollers enable the lifter to
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make a roller coasting movement on and along
the waved top surfaces of the roller coasters.

14. The lie-down massager of claim 13 wherein each of
5 the waved top surfaces of the roller coasters
substantially forms a curvature of a human spinal
cord.
15. The lie-down massager of claim 13 wherein the lifter
10 further comprises a plurality of elongated guides
extending downward from the bottom lower surface
portion of the bottom plate, and the rider further
comprises a plurality of guide bushes upwardly
formed on the rider to releasably receive the
15 elongated guides so as to stabilize the roller
coasting movement of the lifter along the roller
coasters.
16. The lie-down massager of claim 15 wherein the
20 elongated guides are shaped in pins.
17. The lie-down massager of claim 1 wherein the lifter
further comprises a guide shaft fixed between the
cylinder shaft and the top plate, and a guide
25 bearing that guides the guide shaft, wherein the

guide bearing is fixed to the bottom plate, wherein
the guide bearing has a guide hole that receives the
guide shaft, wherein the guide shaft has a polygonal
cross section, and the guide hole has the same
5 polygonal cross section.

18. The lie-down massager of claim 17 wherein the guide shaft has a square cross section.
- 10 19. The lie-down massager of claim 1 wherein the lifter further comprises a tension spring fixed between the top plate and the bottom plate, wherein the fluid operated cylinder overcomes the force exerted by the tension spring to move the top plate.
- 15 20. The lie-down massager of claim 19 wherein the lifter further comprises a guide shaft fixed between the cylinder shaft and the top plate, and a guide bearing that guides the guide shaft, wherein the guide bearing is fixed to the bottom plate, wherein
20 the guide bearing has a guide hole that receives the guide shaft, wherein the guide shaft has a polygonal cross section, and the guide hole has the same polygonal cross section.

21. The lie-down massager of claim 20 wherein the fluid operated cylinder is actuated by pressurized air.

22. The lie-down massager of claim 20 wherein the fluid operated cylinder is actuated by pressurized
5 hydraulic oil.

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